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Ennerdale Rural District

ANNUAL REPORT

OF THE

MEDICAL OFFICER

OF HEALTH

FOR THE YEAR 1959

AND REPORT OF THE

CHIEF PUBLIC HEALTH

INSPECTOR



**ENNERDALE RURAL DISTRICT COUNCIL
HEALTH AND HOUSING COMMITTEE
1959 - 60.**

Chairman Councillor F. B. BENSON

Member ex-officio:

The Chairman of the Council—Councillor J. COOK.

Members: Councillors J. J. Colligan, O. J. Coyles, G. Farran, W. Hannah, C. C. Heron, J. E. High, Rev. F. K. McCann, T. J. Rawling, W. Roe, J. B. Stalker, F. Telfer, A. Threlfell.

HEALTH DEPARTMENT STAFF

Medical Officer of Health:

J. N. DOBSON, M.B., CH.B., D.P.H.

Chief Public Health Inspector:

*† J. BUTTERY, C.R.S.I.

Senior Additional Public Health Inspector:

* R. M. HOWELLS, C.R.S.I.

Additional Public Health Inspector:

* W. Murray, C.R.S.I.

Clerk:

Miss I. DAVIDSON.

(*Joint appointment with Whitehaven Borough*).

Clerk-Typist: Miss I. G. BENN.

*Certificate of Meat and other Foods, Royal Society of Health

† Certificate in Sanitary Science as applied to Buildings and Public Works.

Tel:
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53, Duke Street,
Whitehaven.

TO THE CHAIRMAN AND MEMBERS OF THE
ENNERDALE RURAL DISTRICT COUNCIL.

Mr. Chairman, Councillor Mrs. McPoland and Gentlemen,

The year 1959 was a year of expanding activity in health matters affecting the District. The County Council were making an onslaught on the task of vaccinating young adults against poliomyelitis, and making plans to implement the new Mental Health Act. The Regional Hospital Board completed the first stage of the new West Cumberland Hospital and opened it to acute medical, psychiatric and geriatric use. Within the District a considerable amount of slum clearance work was undertaken, major water works commenced and first steps taken in the complete re-organisation of sewerage of the Central Area. A notable outbreak of food poisoning led to increased supervision of food hygiene generally and so had some beneficial effect.

Against this background the statistics of health in the District were uniformly satisfactory, and in regard to infant survival and tuberculosis were better than ever before. An influenza epidemic had considerable nuisance value but no serious consequences. On the whole this was a very good year.

It might have been less so but for the hard work of the Health Department staff, and the vigour of the Health and Housing Committee in tackling every problem affecting the health of the community. To them, and colleagues in every department of the Council, my thanks are due.

I am, Mr. Chairman, Madam and Gentlemen,

Your obedient Servant,

J. N. Dobson,

Medical Officer of Health.

SECTION A.

STATISTICAL SUMMARY

I.—General Statistics.

Area of Rural District in acres	...	...	88,730
Population (Registrar-General's estimate, mid-year, 1959)	...	...	29,320
Persons per acre	...	...
Number of inhabited houses, 1959-1960, according to rate books	...	...	9,279
Rateable Value	...	...	£307,501
Product of a Penny Rate	...	...	£1,186

VITAL STATISTICS

BIRTHS.

(a)	Number of legitimate live births	...	...	569
	Number of illegitimate live births	...	...	23
	Total live births	...	...	592
	Crude Birth Rate per 1,000 of population			20.2
	Adjusted Birth Rate per 1,000 of population			20.4
(b)	Number of legitimate still births	...	...	11
	Number of illegitimate still births	...	...	3
	Total still births	...	...	14
	Still birth rate per 1,000 total live and still births			23.1

DEATHS.

(a)	Infant Deaths (deaths under 1 year)			
	Legitimate infants	...	...	9
	Illegitimate infants	...	...	1
	Total infant deaths	...	...	10
	Infant mortality rate per 1,000 live births			16.9
	Legitimate infant deaths per 1,000			
	legitimate live births	...	...	15.8
	Illegitimate infant deaths per 1,000			
	illegitimate live births	...	...	43.5
(b)	Neo-Natal mortality rate (deaths under 4 weeks per 1,000 total live births)	...	...	8.5
(c)	Early Neo-Natal mortality rate (deaths under 1 week per 1,000 total live births)			8.5

(d)	Perinatal mortality rate (still births and deaths under one week per 1,000 total live and still births)	31.4
(e)	Maternal mortality (including abortion)	Nil.
(f)	Deaths at all ages	316
	Crude death rate per 1,000 of population	10.8
	Adjusted death rate per 1,000 of population	13.0

The vital statistics are presented in a new form. Although this form is not obligatory, and some of the rates are inevitably based on figures too small to be of value, it is convenient to follow the practice now required of local health authorities. Comparisons are made easier, and the complication of quoting figures for males and females separately disappears.

The following table is given for comparison of certain statistics.

TABLE 1.
Comparative Statistics

	Birth Rate	Death Rate	Infant Mortality Rate
Ennerdale R.D.	20.2	10.8	16.9
Cumberland (Administrative County) ...	17.8	11.9	21.1
England and Wales	16.5	11.6	22.0

The basic figures shown in Table 1 are once again most satisfactory and show an infant death rate lower than ever before in the District. Following long-established precedent the local birth rate remains substantially higher than the national rates shown in Table 2.

TABLE 2.
Birth Rates

Year	Number of Births	Birth Rate per 1,000 of population :	
		Ennerdale R.D.	England & Wales
1955 ...	525	18.6	15.0
1956 ...	557	19.7	15.6
1957 ...	608	21.2	16.1
1958 ...	565	19.6	16.4
1959 ...	592	20.4	16.5

Table 3 shows death rates over the past five years.

TABLE 3.
Death Rates

Year	Number of Deaths		Death Rate per 1,000 of population :	
			Ennerdale R.D.	England & Wales
1955	...	316	12.3	11.7
1956	...	335	14.0	11.7
1957	...	286	11.9	11.5
1958	...	316	13.1	11.7
1959	...	316	13.0	11.6

The death rate is virtually unchanged and the pattern is very much the same as in 1958. Total cancer deaths have shown little variation in recent years. Road accidents killed four people following a year clear of death on the roads. Tuberculosis caused five deaths, while measles and influenza were the only other fatal infective conditions, each being responsible for one infant death.

No deaths took place from maternal causes. The maternal mortality rate for England and Wales in 1959 was 0.38 deaths per 1,000 total live and still births.

Infant mortality rates are given in Table 4, and causes of death in Table 5.

TABLE 4.
Infant Death Rate

Year	Number of Infant Deaths		Death Rate per 1,000 live births :	
			Ennerdale R.D.	England & Wales
1955	...	20	38	25
1956	...	16	29	24
1957	...	16	26	23
1958	...	12	21	23
1959	...	10	17	22

Once again there were few infant deaths due to immaturity, and even the record low infant mortality rate of 1958 has been beaten. This good fortune is in keeping with a low stillbirth rate, and the perinatal mortality rate of 31.4 is also low. Perinatal mortality is a good guide to the quality of the maternity services, provided the population under consideration is sufficiently large. Even though variations are to be expected in a district of fewer than 30,000 people, a rate better than that of the country as a whole (34.2 in 1959) must be viewed with satisfaction.

TABLE 5.

Deaths of Infants under 1 Year of Age.

Cause of Death	Age in Weeks				Age in Months				Totals
	0—	1—	2—	3—	1—	3—	6—	9—	
Prematurity	3	—	—	—	—	—	—	—	3
Congenital malformations	2	—	—	—	—	—	—	—	2
Bronchopneumonia	—	—	—	—	—	—	2	—	2
Inhalation asphyxia	—	—	—	—	—	1	—	—	1
Measles	—	—	—	—	—	—	1	—	1
Influenzal meningitis	—	—	—	—	—	1	—	—	1
Total deaths	Under 1 month				Over 1 month				10
	5				5				

Cancer Mortality.

There were 50 deaths from cancer, the primary sites of the lesions being shown in Table 6.

TABLE 6.
Deaths from Cancer

Location of Disease			Male	Female	Total
Mouth and tongue	...		1	1	2
Larynx, pharynx	...		1	1	2
Stomach	...		3	8	11
Colon and Caecum	...		1	3	4
Rectum	...		2	1	3
Pancreas	...		---	1	1
Liver, gall bladder	...		1	1	2
Lung and Bronchus	...		7	2	9
Uterus	...		—	2	2
Breast	...		—	2	2
Lymphosarcoma	...		2	1	3
Other sites	...		3	6	9
			21	29	50

The annual number of cancer deaths has been remarkably steady over the past four years, while the cancer death rate for England and Wales is slowly rising. A cancer death rate on the national scale would in fact have increased Ennerdale Rural District deaths from 50 to 63, or by 26%. Within the District there is no change to report, the largest number of deaths being due as usual to cancer of the stomach, with lung cancer coming a very close second.

TABLE 7.
Cancer Death Rates

			Annual Death Rate per 1,000 of population :	
Year	Number of Deaths		Ennerdale R.D.	England & Wales
1955	...	60	2.09	2.06
1956	...	51	1.76	2.07
1957	...	50	1.73	2.09
1958	...	48	1.65	2.12
1959	...	50	1.70	2.14

TABLE 8.
CAUSES OF DEATH DURING THE YEAR 1959.

Registrar-General's Classification					Males	Females
Tuberculosis of Respiratory System	...				4	1
Other Tuberculous Diseases	...				—	—
Syphilitic Disease	...	...	...	...	—	—
Diphtheria	...	...	...	...	—	—
Whooping Cough	...	...	...	...	—	—
Meningococcal infections	...	...	...	...	—	—
Acute Poliomyelitis	...	...	...	...	—	—
Measles	...	...	...	...	—	1
Other infective and parastic diseases	...				—	—
Malignant neoplasm, stomach	...				3	8
Malignant neoplasm, lung and bronchus	...				7	2
Malignant neoplasm, breast	...				—	3
Malignant neoplasm, uterus	...				—	1
Other malignant & lymphatic neoplasms	...				11	15
Leukaemia, aleukaemia	...	...	...	...	2	—
Diabetes	...	t	...	...	2	3
Vascular lesions of nervous system	...				23	26
Coronary disease, angina	...	...	...	...	39	22
Hypertension with heart disease	...				5	3
Other heart disease	...	...	...	...	17	20
Other circulatory disease	...	...	...	...	12	7
Influenza	...	...	...	...	—	1
Pneumonia	...	...	...	...	4	6
Bronchitis	...	...	...	...	10	2
Other diseases of respiratory system	...				6	1
Ulcer of stomach and duodenum	...				1	2
Gastritis, enteritis and diarrhoea	...				—	—
Nephritis and nephrosis	...	...	...	...	—	—
Hyperplasia of prostate	...	...	...	...	—	—
Pregnancy, childbirth, abortion	...				—	—
Congenital malformations	...	...	...	...	1	2
Other defined and ill-defined diseases	...				16	15
Motor vehicle accidents	...	...	...	...	4	—
All other accidents	...	...	...	...	3	4
Suicide	...	...	...	...	1	—
Homicide and operations of war	...				—	—
Total (all causes)					171	145

SECTION B.

GENERAL PROVISION OF HEALTH SERVICES.

(a) Staff

There were no changes in staff during the year.

(b) Laboratory Facilities

Use is made of the bacteriological facilities at Whitehaven Hospital under the direction of Dr. A. C. F. Ogilvie, and of the Public Health Laboratory Service at the Cumberland Infirmary directed by Dr. D. G. Davies. Analytical services are provided by Messrs. Ruddock and Sherratt, Public Analysts, Warrington.

(c) Local Health Authority Services

Medical services provided under Part III. of the National Health Service Act are the responsibility of the Cumberland County Council. Information about the provision of Home Nursing, Home Helps, Immunisation and other services is available at the office of the Senior Assistant County Medical Officer, Area Health Office, Flatt Walks, Whitehaven.

Clinics are held as follows:—

	Frizington	Cleator Moor	Egremont
School Clinic	... Mon. 9-30 a.m.	Thurs. 9-30 a.m.	Thurs. 9-30 a.m.
Child Welfare	... Mon. 2-00 p.m.	Thurs. 2-00 p.m.	Thurs. 2-00 p.m.
Ante-Natal	... Wed. 2-00 p.m.		
Dental	... Tue. 9-30 a.m.	Wed. 2-00 p.m.	Mon. 9-30 a.m.

A number of ante-natal clinics are conducted by general practitioners in conjunction with the district midwife.

Appointments may be made through the School Clinics for attendances at the following special clinics:—

Ophthalmic, Ear, Nose and Throat, Orthopaedic, Child Guidance, at Flatt Walks Clinic, Whitehaven.

Speech Therapy, at Cleator Moor and Egremont Clinics
Orthoptic treatment at Whitehaven Hospital.

In addition to the provision of clinics and routine medical inspection the School Health Service now tests the hearing of all children on admission to school. The County Council employs a teacher of the deaf as well as the necessary audiometricians.

The Occupation Centre, Flatt Walks, has 40 places for mentally backward children.

(d) Hospital Services

Facilities provided by the Regional Hospital Board include Whitehaven Hospital, Flatt Walks: 120 beds. General hospital services. General practitioners have X-ray facilities directly available.

The first stage of the new West Cumberland Hospital at Hensingham was completed and brought into use in December, 1959. The accommodation at present includes 60 geriatric, 24 medical and 16 psychiatric beds.

Homewood Annexe has 41 beds for tuberculosis and diseases of the chest.

The Hollins, Hensingham: 31 beds. Pre-convalescent surgical cases, with a small number of gynaecological beds.

Galemire, Cleator Moor: From infectious diseases hospital with 24 beds, to chronic sick use.

The Chest Clinic serving the area is in St. Bridget's Lane, Egremont.

Part III hospital accommodation is available in Meadow View House, Whitehaven (31 beds) by joint user agreement with Cumberland County Council.

(e) National Assistance Acts

The task of providing residential accommodation for elderly people in certain circumstances, other persons in unforeseen need, and welfare services for people handicapped in a number of ways, is a duty of the County Council.

Old people fall into one of three classes. First, a small proportion require care and attention which cannot be given at home for one reason or another. Accommodation for such people exists at Meadow View House, (150 beds) and at Garlieston, a modern type home (32 beds), in Whitehaven.

About nineteen out of every twenty old people live at home however, comprising the other two classes, namely those who are able to look after themselves, and those who need some assistance. In Ennerdale Rural District the housing needs of those who are fit and well are substantially catered for; in addition to those living in conventional houses many are accommodated either in one-bedroomed flats, of which there are 40, or two-bedroomed bungalows (24).

The others, who very often live alone and require both more suitable housing and some measure of help from the Welfare Services, are a joint concern of the County and District Councils. The problem of suitable accommodation for them was one of these closely examined by the County Council's Working Party on the needs of the aged, which published its findings during the year.

The general policy of the County Council is to assist old people to remain at home so far as is practicable and the County Health Department already gives much help through its health visiting and home help services, while the district nurses continue to play an invaluable part. The burden of some old people could be greatly eased and services improved however by building, as the Working Party suggests, groups of 15-24 one-bedroomed dwellings combined with a warden's house and certain communal facilities. The latter would include a common room, one or two bedrooms for guests of the residents, additional toilet facilities and possibly central heating. The individual dwellings would incorporate certain safety features, e.g. hand holds to baths, and some would have special doorways to allow the passage of a wheel chair. All would have call bells so that help could be summoned if necessary.

Apart from assisting frail people to retain some independence and privacy, such a grouping of dwellings facilitates the provision of welfare services generally. It is much easier to provide, for example, meals on wheels or a laundry service such as is under consideration.

Not everyone welcomes the idea of a warden, the fear being that such a person is there to police the activities of the old people. Rather it is that she is there as a friend in need, to maintain some daily contact with them, give a helping hand in emergency and call on the appropriate statutory or social service as necessary.

Joint schemes such as this deserve careful consideration. They offer means of helping certain old people to live in a home of their own where otherwise they would be obliged to seek accommodation in a residential home.

Meantime plans are in hand for the provision of a purpose-built old people's home of 38 beds in the Rural District, for which Egremont is favoured as a site. This is one of the measures required to allow the closure of the old unsatisfactory Meadow View House.

A number of elderly people were visited at the request of various agencies during the year but in no case was it necessary to arrange for their transfer to hospital under the provisions of the National Assistance Acts.

A welcome step forward in 1959 was the formation of the Cleator Moor and District Old People's Welfare Committee under the chairmanship of Dr. B. O'Donovan.

(f) Problem Families

The Ennerdale Sub-Committee of the County Council's Children Neglected in their own Homes Committee met twice during the year. Reported improvement allowed the closure of two cases, while one new case was added to the list. While the turn-over of cases is not great, these meetings serve a useful purpose in enabling representatives of both statutory and voluntary bodies to meet, discuss difficulties, share information and agree on a plan of action.

One family presented as a case of overcrowding, there being elderly parents, four adult children and eleven illegitimate grandchildren, two of whom were adult also. One of these last was married and had two children. The grand total was nine adults, eleven children, and a lodger in the one house.

There are difficulties in the way of offering housing accommodation to unmarried mothers without means, and with the exception of the lodger there was no over-crowding in the legal sense. None the less this was a most unhealthy state of affairs. Fortunately the Council was able to re-house the entire family, with the exception of the lodger, in a converted former public building and thus alleviated a situation which, it is hoped, will remain unique.

SECTION C.

SANITARY CIRCUMSTANCES OF THE AREA

A report by the Chief Public Health Inspector on the work of the year has been submitted and will be found at the end of this report.

Water Supplies.

A new 11 ins. section of water main from Wilton to Pallaflat reservoir was completed. Replacement of defective 12 ins. and 9 ins. sections is in hand.

The September drought resulted in very considerable falls in water levels in reservoirs throughout the District. Gosforth reservoir was very nearly dry and it was necessary to supply farms at Boonwood by water-cart. Both the Gosforth and Meadley supplies had to be supplemented by admitting surface water, resulting in added deterioration in quality. Only areas supplied from Ennerdale Lake were exempt from this deterioration in purity, which affected many upland surface waters in the country as a whole. Unfortunately the chlorination of the Meadley supply was very erratic; this coupled with inefficient filtration gave added anxiety.

This situation eased with the ending of the drought, though improvement in sampling results, only a few of which are quoted in full at the end of the report, was slow to follow.

The completion of the scheme for replacing the Meadley supply with Ennerdale Lake water feeding a new reservoir at Nannycatch is expected during 1960, and will eliminate what is recognised to be the most unsatisfactory supply in the area.

By agreement with the United Kingdom Atomic Energy Authority a branch connecting pipe was laid to the 18 ins. Wasdale main and the water supply to Gosforth augmented. The necessity for this arose directly out of the drought period but the additional water has since proved to

be an important supplement to the regular Gosforth supply. This water is known to be of a high standard of purity.

Sewerage.

It has been appreciated for some time that sewage disposal in the district generally falls short of acceptable standards. A difficulty in applying the remedy perhaps is the interval that must elapse between apprehending trouble and the execution of works. As an example, reference was made in the previous annual report to the moves made, starting in 1953, to secure a new sea outfall for Egremont sewerage at Braystones. During 1959 a small part of the Egremont scheme, the Bridgend storm overflow, was approved by the Ministry of Housing and Local Government, and completed. The major part of the £46,000 works was approved in turn by the Council, the County Council and the Cumberland River Board, but at the end of the year was still awaiting Ministerial approval. It was not until March 1960 that a local inquiry was held, as a result of which final approval of the construction of a new 21 ins. sea outfall has been received.

An important step during the year was a review of the Northern Area sewerage in collaboration with the County Council. The principal causes for dissatisfaction were; at Distington, North and South, insufficient sedimentation tanks overflowing into streams or on to land; at Howgate, inadequate treatment by sedimentation tank and filter discharging to stream; at Lowca, sedimentation tanks discharging into an open drain running past the colliery workings. It is proposed that these works should be abandoned, a trunk sewer being constructed to collect from Distington North and South, Low Moresby and Lowca, with an extension sewer to Tow Low, Moresby. The whole will discharge through a sea outfall at Parton.

A more difficult problem is the renewal or replacement of the Central Area Sewerage. In 1923 the Norbeck and Cleator Works serving Cleator Moor and Cleator were built to a modern design. Unhappily the Hampson tank on

which they were based has not stood the test of time and was generally abandoned as a means of sewage treatment within a few years. To unsatisfactory sedimentation has been added the embarrassments of industrial development and growth of population outstripping the works' capacity. Slum clearance too has played a part; the consumption of water per head of population is now considerably greater than it was nearly forty years ago.

To put it as shortly as possible the Consultant Engineers consider the works to be loaded to more than three times their capacity. Although the sewage treated is a "dilute" sewage, pollution of the Rivers Ehen and Keekle is inevitable. Furthermore, the Linethwaite works serving Moor Row are virtually ineffectual. The sedimentation tanks do little more than break up the sewage which then traverses sewage-sick irrigation ditches prior to discharge into Scalegill Beck, the confluence of which with Linethwaite Beck forms Pow Beck. Pow Beck runs some three miles to discharge eventually on to the South Shore at St. Bees.

Here is to be found yet another highly unsatisfactory state of affairs. The original sea outfall for St. Bees sewerage, built 1882, discharged below low water mark. Within a couple of years silting-up necessitated opening the pipe to allow discharge about 120 yards below high water level. In 1884 this was of lesser consequence since the area concerned was rocky and but little used. Now it is sandy, and crude sewage pours on to the beach between tides.

Of three Central Area remedial schemes submitted by the Consultant Engineers the least expensive in capital and annual charges is also the simplest. That is not to say it is inferior to more complicated schemes which demand much more in the way of skilled maintenance. In essence it amounts to the abandonment of existing works at Cleator, Cleator Moor and Linethwaite and replacing them by a trunk sewer to which the St. Bees sewerage would be linked. Eventual discharge would be at a point off St. Bees Head, determined by marine survey to give rise to minimal beach pollution.

Sea disposal of sewage, untreated except by comminution, has necessitated the most careful consideration in view of the campaign against the fouling of the nation's shores in recent years. Certainly no-one can justify the disgusting pollution which is all too prevalent along Britain's coasts, and no-one needs a doctor to tell them that it is obnoxious to bathe in sewage. At what point however does danger to health arise? The 1959 Medical Research Council report on Sewage Contamination of Bathing Beaches in England and Wales, and the 1959 report of the Public Health Laboratory Service Committee on Bathing Beach Contamination, give convincing evidence that the danger is negligible even when pollution is visible. In the case of properly constructed and sited sea-outfalls the danger is reduced to the level of theoretical possibility.

There seems, then, no objection to the trunk sewer proposal on health grounds. Rather should it be welcomed as a means of eliminating gross pollution of the River Ehen, the treacherous open sewer that is Pow Beck, and the revolting outflow on to St. Bees beach through which children may be seen paddling on any summer's day.

Housing.

Following representation by the Medical Officer the Council declared three Clearance Areas in Cleator Moor in March 1959. It was submitted that a total of 84 houses in Birks Road, Aldby Street, North Street and Wyndham Street were unfit. The majority of this property being centrally situated and conveniently close to shops and other facilities, this level site seemed particularly suitable for redevelopment. Accordingly the Council resolved to acquire the land both to secure the proper clearance of a prominent site and to use it for the erection of thirty aged persons bungalows.

A public enquiry was held in October and the Minister subsequently confirmed that all but two of the houses in the clearance areas were unfit. Re-housing from the area prior to demolition is proceeding in 1960.

Representation of 35 unfit houses in Egremont led to the declaration of a Clearance Area covering parts of Drummond Street, Rafferty Street and Longcroft in August, 1959. Subsequent to a public inquiry held in November, the Minister decided that all the houses in the Area were unfit and confirmed the Clearance Order. Re-housing from this Area awaits the construction of houses at Orgill, Egremont.

Caravans, Chalets and Beach Bungalows.

Interest in caravans and similar dwellings has been stimulated in the past year by development in the Rural District, mainly at St. Bees and Nethertown, and the appearance of the Arton Wilson report on Caravans as Homes, in 1959.

Along the twelve miles of coastline running south from St. Bees is to be found every type of caravan, chalet, hut, converted bus and railway coach, brick or concrete or breeze-block bungalow. Natural concentrations, encroaching inland also, exist at the limited points of access to the beach, predominantly St. Bees, Coulderton, Nethertown and Braystones. Inland sites are few, namely four at Egremont, and one each at Gosforth and Wasdale. Individually sited caravans, many of them unlicensed, are to be found throughout the district but their numbers are small.

In a tour of inspection, unsuitable siting and ramshackle construction stand out forcibly in many cases, made no less ugly in some instances by the over-generous use of garish paint where camouflage might be more welcome. Remedies are less easy to find than criticism, however. Some of the more objectionable development took place before both the constitution of the present Rural District and the enactments purporting to control it. Then there are the endless difficulties of control under Public Health and Town and Country Planning legislation, to which Sir Arton Wilson devoted sixteen pages in his report, which are well summed up in his comment that such regulations as exist are designed primarily for dealing with dwellings which are not caravans or with caravans which are not dwellings. His report deals

predominantly with caravans used as homes, and one can only be grateful that Ennerdale Rural District is spared the problems arising from large scale use of caravans for housing accommodation. Nevertheless there are too many structures, not "moveable dwellings," erected with byelaw and planning permission, which could be used for permanent housing, although defective water supply and drainage facilities render them quite unsuitable for this purpose.

Fortunately difficulties of access and the lack of shopping and educational facilities appear to have weighed against such use. Some owners too have carefully built and scrupulously maintained beach property which they use only for their own families; refusal to sub-let minimises the nuisances to be expected from casual visitors with equally casual regard for inadequate sanitation. In fact it is surprising how little trouble arising from the use of chemical closets and the lack of a refuse collection service is found at routine inspections of the permanently sited "bungalows" and caravans.

It is not easy to say how many bungalows or chalets, and how many caravans are sited in the District at any one time. This is not due altogether to mobility but in part to difficulty in classification so that a count undertaken by one officer may well vary from that taken by another a few weeks or months later. The question as to whether a structure is a moveable dwelling in the eyes of the law cannot always be decided by looking at it.

There are nine site licences in force allowing the siting of 616 caravans, but the number of vans is considerably less as some sites are in process of being developed and one or two of the smaller sites are in virtual disuse. Until 1959 the most objectionable site, partly because of its size and prominence, was that on the North shore at St. Bees. There were 34 vans and other structures of all varieties on a site without water supply or drainage, the entrance to which was flanked by an insanitary refuse dump. Under new ownership the site was cleared and agreement reached on the facilities to be provided. On the reconstructed site visitors

may now enjoy the use of a properly equipped chalet, or site a genuine trailer caravan, and find the amenities they rightly expect. Needless to say, the overall appearance is improved out of recognition; this, and other more recently licensed sites, show what can and should be achieved.

Of structures labelled "beach bungalows" there are some 115, of which 49 are strung along Braystones beach and 37 at Coulderton. To the passenger in any train threading its way along the coast they appear as an irregular line of flotsam thrown up just above high water mark. Sparse distribution in an area of beach relatively little used means there are, fortunately, no significant public health problems other than that of unsatisfactory water supplies. Sampling of a number of so-called springs regularly in use has revealed pollution of potentially dangerous extent. Restrictions on the use of certain supplies have been suggested at Coulderton pending the provision of a safe supply, which is quite a simple matter. In addition, the surveyor and medical officer have recommended rigid adherence to certain constructional standards together with availability of pure water which would, if followed, severely limit further beach development at the present time.

Food Hygiene.

A fairly widespread outbreak of food poisoning occurred due to the supply by a local bakery of cakes filled with infected artificial cream. No cases were notified, and although most of the persons affected were ill within 48 hours of consuming the cakes it was only a chance conversation with a general practitioner a week later which brought the matter to light. This doctor was treating a case of haemorrhagic diarrhoea, remarked that diarrhoea was prevalent, and agreed to his patient being visited.

The patient and her husband, who was also affected, had attended a wedding reception and been taken ill with abdominal pain, diarrhoea and fever, four days later. It was quickly established that several guests had been ill, and the caterers were visited. Enquiry here showed that the

firm concerned had catered for three wedding receptions on the day in question. These had been held in locally-hired halls several miles apart, and no complaints had been received by the firm. Menus for each of the receptions were secured, the manufacturing premises inspected and enquiries of the guests begun.

While these were in progress laboratory reports on specimens from the first patient established the cause of her illness as *Salmonella typhimurium*.

Altogether some 280 people had eaten food supplied for one reception or another, of whom 208 were traced and questioned. A number were missed since in no case was a list of guests available. Sixty-nine (27%) were found to have been affected, of whom 55 had had diarrhoea. Some of these patients had severe pain, described in three instances as being "worse than labour pains," while three cases were haemorrhagic. The commonest interval between consuming the food and the onset of symptoms was two days, though some started within 24 hours and others were delayed up to eight days. Only one of the latter was likely to have been a return case, as was one at ten days after the event.

The suspect food was synthetic cream. Its consumption in cakes or in trifles was the only factor common to the sufferers, and a 7-month baby was acutely ill after being given cream trifle only, "just as a treat."

None of the "cream mix" used to make artificial cream for the receptions was left for sampling, but samples were examined from other batches supplied by the manufacturers in London. These were received by the caterers in sealed one gallon cans and refrigerated on receipt till required for use.

The local Health Department in London reported that the manufacturing process was regularly supervised by them and showed a high standard of hygiene. Their regular bacteriological examination gave confirmation of this and the mix employed, containing sodium algenate and methyl ethyl

cellulose, was believed by the manufacturers to prevent further bacterial growth. Despite this care, sampling showed that considerable bacterial multiplication could and did occur, and the worst sample taken showed that the number of organisms normally present on manufacture had increased by 10,000 times. Artificially contaminated samples showed also that *B. Coli* grew rapidly in the mix at both room and body temperature. It seemed that the cream was a good medium for the growth of food poisoning germs if not handled very carefully.

The caterers' procedure with the "mix" was to whisk it with sugar, then fill and decorate cakes, delivery to consumers being made on the day of preparation of the cream.

The utensils, however, were found to be cleansed inadequately (though appearing clean when dry), and mixing bowls found to be kept on the floor in a place where animals and bakehouse staff could readily contaminate them. The cream was placed with the hand into icing ("Savoy") bags, and circumstances suggested that this and similar operations had been carried out after visits to the W.C. without hand-washing. The bags themselves were scrubbed with an old brush on the side of the sink after use and never boiled or properly dried; they appeared dirty.

After the cakes or trifles were filled, the finished goods were kept for anything up to several hours in a warm atmosphere favouring bacterial growth.

The source of contamination was not found: specimens from bakehouse staff showed none of them carrying food-poisoning organisms. It is possible that one was an unwitting carrier at the time, or that the germs were from a bakehouse cat. From 1 to 2% of cats are said to carry the organism concerned, and cats were seen to jump on the bakehouse tables at two visits of inspection.

Whatever the origin of the outbreak there was, yet again, a demonstration of the usual features leading to the occurrence of food poisoning. The food responsible is a

good medium for germs to grow in, it is handled too much by hands too little washed, mixed by and in utensils that are not clean, and finally kept just warm for just too long before eating.

In this instance, after an overhaul of bakehouse procedure and equipment, the firm planned structural alterations to meet the requirements of the Council. Eventually, however, it was decided not to proceed with the necessary reorganisation, and manufacturing at these premises was discontinued.

Although the firm was primarily at fault, some blame for the existence of such unsatisfactory conditions must be attached to sufferers who realise what makes them ill, yet who never complain. This is particularly likely to be the case when the patient is someone's guest. There is a natural reluctance to complain about hospitality received, for that is what it amounts to, and many guests indeed went out of their way to praise the meal which made them ill. Yet food poisoning is unpredictable in its effects and causes a small but regular annual mortality. People who suspect that a particular meal has made them ill should inform their own doctor or medical officer of health. That at least may help to prevent a recurrence of these distressing happenings. A wedding should be a memorable event, but not by virtue of griping the guests.

SECTION D.

PREVALENCE OF, AND CONTROL OVER, INFECTIOUS DISEASES

Notifications, other than those of tuberculosis, are shown in Table 9.

TABLE 9.
Infectious Disease Notifications

Disease	No. of cases notified		Admitted to Hospital	Died
Scarlet Fever	...	19	—	—
Puerperal pyrexia	...	3	—	—
Acute primary pneumonia	...	3	1	—
Erysipelas	...	1	—	—
Measles	...	334	—	1
Whooping Cough	...	26	4	—

This was a “measles year” and unfortunately an eight month-old infant died from this disease. Since that time a supply of gamma globulin has been kept available for the protection of infant contacts of measles cases; in the event of unusual demand it can be obtained and supplied within hours to any practitioner on request.

Four children with whooping cough were sufficiently ill to necessitate admission to Galemire Hospital. Otherwise there was no notified disease of note.

In the second week of January however there was a steep rise in claims for sickness benefit submitted to the Cleator Moor office of the Ministry of Pensions and National Insurance. Enquiry showed that whole families were being affected with a short, sharp illness characterised by a rapid onset, children in particular seemed liable to arrive at school

fairly well and be in a state of near-collapse in a matter of hours. Frontal headache was common and a raised temperature usual, but few had any sore throat or cough. On the other hand nausea and vomiting were so frequent as to suggest that the condition was epidemic winter vomiting. Within a week there was extension of the outbreak to Bigrigg, Moor Row, Egremont and Whitehaven.

A number of nasopharyngeal swabs submitted to the Public Health Laboratory Service in culture broth within hours of collection were negative. Ordinary swabs from cases in nearby Seascale, and sent through the post, meanwhile yielded growths of Influenza B virus. Some reserve was felt in ascribing the Cleator Moor outbreak to influenza also since the Seascale cases included very few instances of vomiting. By contrast a Whitehaven school with typical involvement in the spread from Cleator Moor had 75% of the scholars on roll affected and of these over half were affected with vomiting. Serological results from Cleator Moor cases were to show however that the cause of the epidemic was indeed Influenza B, despite the differing clinical manifestations.

Five weeks after the start of the outbreak the usual pattern of events was well established, namely a three week period to run through a school with 20 to 40% of the pupils ill at any one time, while adult infection lagged behind the children. Although adults were heavily involved in Cleator Moor, in other areas of Ennerdale Rural District and in Whitehaven absences from work averaged only 10% above the seasonal normal. That indicated the position in persons under 65. Events were to show that the most seriously affected were people over 65, indeed of 1121 deaths due to influenza in England and Wales in the week ending 21st February, 768 were of persons in this age group. Although only a fifth of the 147 residents of Meadow View Hospital, Whitehaven, contracted the disease, there were six deaths in nine days from this cause, all except one in the elderly. There were no deaths in Ennerdale Rural District from the outbreak, though an isolated death due to influenza occurred in the last quarter of the year.

TUBERCULOSIS

Notifications in 1959 were received as follows:—

TABLE 10.
Tuberculosis Notifications

		Respiratory	Non-Respiratory	Total
Male	...	16	—	16
Female	...	5	3	8
		—	—	—
Total	...	21	3	24
		—	—	—

The 36 new notificatins of pulmonary tuberculosis in 1958 were the lowest ever recorded in the district.

The 1959 figure of 21 is even more gratifying, and from a new case rate of three times the national level a few years ago represents a fall to less than 50% above the national rate. The present position is shown in Table 11.

TABLE 11.
Tuberculosis Incidence

		Ennerdale R.D. (Pop'n 29,320)		England & Wales (Pop'n 45,504,000)	
		New Cases.	Case Rate per 100,000	New Cases.	Case Rate per 100,000
Respiratory	...	21	72	24,499	54
Non-Respiratory	...	3	10	3,280	7

The tuberculosis death rate has shown little variation in the last few years and may well remain the figure most resistant to improvement. Its continuation at a relatively high level is a reflection of the long-standing grip of tuberculosis on the District and the number of old and chronic cases.

TABLE 12.
Deaths from Tuberculosis (Rates per million).

Year	Respiratory Tuberculosis Ennerdale			All forms of Tuberculosis Ennerdale		
	No. of Deaths	Death Rate	England & Wales Death Rate	No. of Deaths	Death Rate	England & Wales Death Rate
1955	6	210	130 ...	7	240	150
1956	5	170	110 ...	6	210	120
1957	4	140	95 ...	5	170	110
1958	4	138	89 ...	6	206	100
1959	5	170	77 ...	5	170	85

The preceding annual report summarised the 1958 Mass Radiography Campaign, and it might be that the work then carried out was a direct cause of the lower notification rate in 1959. It is certainly the explanation of the low figure of 412 persons examined by mass radiography during the year. Even so, another active tuberculosis case was discovered thereby, while provisional figures for 1960 suggest that a high discovery rate in proportion to the number of examinations carried out is being maintained. As shown in Table 13 more than a quarter of all the respiratory cases notified in the district since 1952 have been found by this means. The deployment of the Mass X-Ray Mobile Unit in Ennerdale has always been, and still is, value for money.

TABLE 13.
Mass X-ray Statistics.

Year	Number X-rayed	New active case discovered by X-ray	Notifications during year
1952	1,918	19	58
1953	2,882	24	61
1954	4,303	29	72
1955	3,960	18	71
1956	3,807	12	64
1957	2,661	8	40
1958	5,917	7	36
1959	412	1	21
Total	25,860	118	423

VACCINATION AND IMMUNISATION

B.C.G. Vaccination.

An improved response to the offer of tuberculosis protection to schoolchildren in 1959 halted a decline in acceptances which had become rather worrying. This change for the better was accompanied by a reduction in the number of children found to have been exposed to tuberculosis infection. All but two of those needing vaccination were protected.

The value of B.C.G. vaccination is abundantly proved and few counties in England and Wales have better cause than Cumberland to avail themselves of this simple measure. Parents of thirteen-year old children are urged to consider most seriously the possible consequences of their boys and girls leaving school unshielded against tuberculous infection at their place of employment. B.C.G. is the first line of defence against this danger.

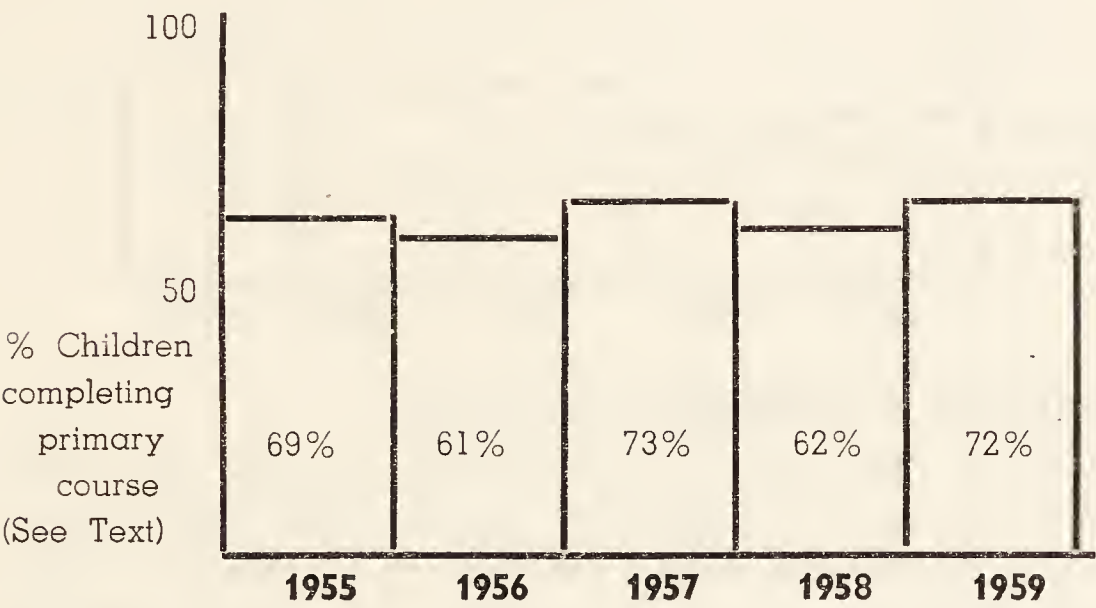
TABLE 14.
B.C.G. Vaccination.

Year	No. of children eligible for test	No. & %age of parents consenting	No. tested	No. & %age Mantoux positive	No. Mantoux negative	No. given B.C.G.
1955	... 290	252 (87%)	244	98 (40%)	146	144
1956	... 297	252 (85%)	235	98 (42%)	137	137
1957	... 387	316 (82%)	311	114 (37%)	197	195
1958	... 414	296 (73%)	284	101 (36%)	183	182
1959	... 315	247 (78%)	234	80 (34%)	154	152

Diphtheria Immunisation.

The figure shows a modified diphtheria immunisation index as explained in previous reports, and is thought to give an up-to-date representation of the proportion of children being immunised. The 1959 figures show an improvement for which we may well be thankful. The number of localised outbreaks of diphtheria in the country in the last year or two is enough to suggest that trouble lies yet ahead for those incautious communities where diphtheria immunisation is neglected.

Fortunately most parents are agreeable to immunisation, and it is mainly a matter of having facilities freely available and seeing that they are continuously being brought to the notice of mothers. Family doctors and assistant county medical officers alike have done much good work in this respect, and there is reason to believe future levels of immunisation will improve further yet.



Whooping Cough Immunisation.

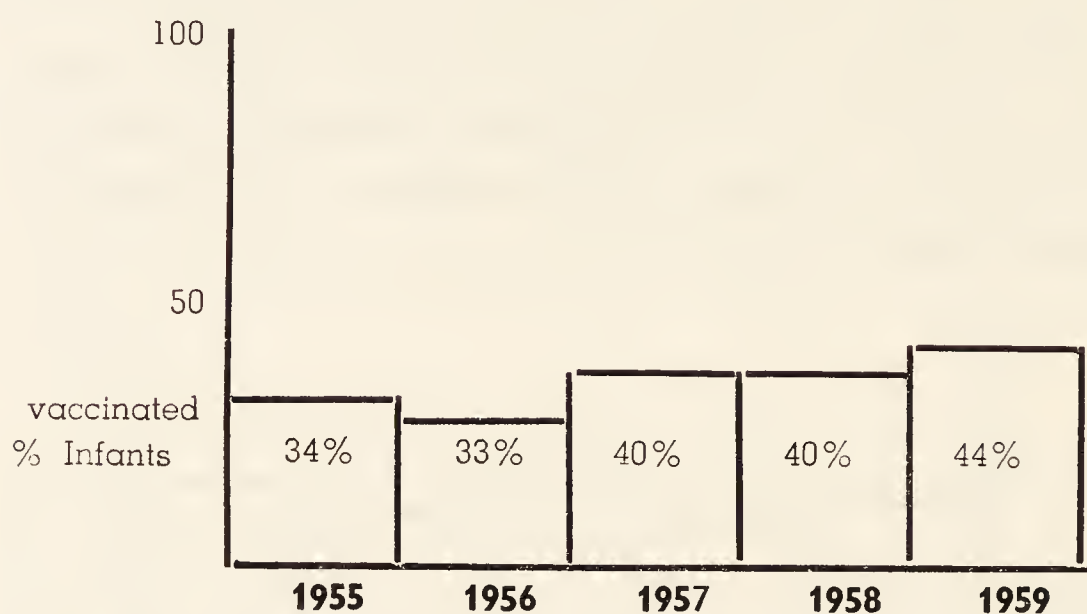
Protection against whooping cough has been “on offer” at County Council clinics only since 1957, and in 1958 was making slow headway. According to the returns no more than a quarter of infants born in that year were immunised. The 1959 position was greatly improved, the 408 courses given representing some two-thirds of the previous year’s births.

Smallpox Vaccination.

Though recent cases of smallpox in the country have shown a curious reluctance to spread, most medical officers feel the occurrences of smallpox in a relatively unvaccinated community is a matter for alarm. No apology then is made for repeating the smallpox vaccination figure, which shows vaccination to be still the most neglected protective measure. The commonest objection encountered is the resulting scar.

In fact this is becoming a misnomer, and vaccination as practised to-day leaves little more than a dimple bearing no resemblance to the disfigurements of thirty and more years

ago. It ought to be possible to improve considerably upon the present figures for smallpox protection.



Poliomyelitis Vaccination.

During 1959 only 42 infants born in that year completed a course of immunisation against poliomyelitis and, indeed, more than half could not be done by reason of being under six months of age. Of babies born in 1958, however, 278 received two injections in 1959 which, added to 44 so immunised during their year of birth, makes a total of 322 infants protected out of 565 live births in 1958. To have protected only 57% of a year's births is not impressive, and is a marked decline over the previous year.

One reason perhaps was the diversion of effort to bring in the older age groups. Here it is much less easy to give an idea of the proportions being immunised since the size of the eligible age groups is not known. The amount of work done in all groups is shown in the following Table.

TABLE 15.
Poliomyelitis Immunisation, 1959.

Age Group	Primary Course	Booster Doses
1958	278	83
1953 - 57	594	1,732
1943 - 52	1,006	3,767
1933 - 42	1,494	198
Total :	3,372	5,780

**REPORT
OF THE
CHIEF PUBLIC HEALTH
INSPECTOR**

PUBLIC HEALTH INSPECTOR'S ANNUAL REPORT

1959

Housing

The following shows the housing position and action taken during the year :—

A.	1.	Total number of occupied houses in the district	...	...	...	...	...	8,896
	2.	Total number of occupied houses subject to Demolition Orders, Closing Orders or Undertakings	...	...	...	...	...	100
	3.	Estimated number of houses (exclusive of above) which are unfit for habitation and cannot be made fit at a reasonable cost						800
	4.	Estimated number of sub-standard houses (exclusive of above) which could be repaired and made fit	...	...	...	...	...	1,900
	5.	Number of houses found to be overcrowded	...	...	...	...	...	15
B.	1.	Waiting Lists.						
		Total number of valid applicants on Council's waiting list, exclusive of those living in houses under A. 2 and 3 above	...					535
C.		New Houses completed during the year.						
	1.	By or for the Council :—						
		For aged persons	...				3	
		For Slum Clearance	...				30	
		For Industrial Workers'					50	
							—	83
	2.	Private building	...	...	...			40
								<hr/>
		Total	...	...	...			123
								<hr/>

D. 1.	Number of houses for which application was made by private persons for Improvement Grants under the Housing Act, 1949	26
2.	Number of houses for which grants were approved	22
3.	Number of houses where improvements were carried out and grants paid ...	20
4.	Number of houses purchased or taken over by the Council with a view to improvement or conversion	Nil
5.	Number of houses improved by the Council :—	
	(i) With grant	Nil
	(ii) Without grant	Nil

E. Houses Demolished.

In Clearance Areas :

	Houses Demolished	Displaced : Persons Families	
1. Houses unfit for human habitation	28	52	16
2. Houses included by reason of bad arrangement, etc.	Nil	Nil	Nil
3. Houses on land acquired under Section 43, Housing Act, 1957 ...	Nil	Nil	Nil

Not in Clearance Areas :

4. As a result of formal or informal procedure under Section 17 (1), Housing Act, 1957	14	54	10
5. Local Authority owned houses certified unfit by the Medical Officer of Health	Nil	3	2

F. Unfit Houses Closed.

	Number	Displaced : Persons Families	
1. Under Sections 16 (4), 17 (1) and 35 (1), Housing Act, 1957 ...	21	70	16
2. Under Sections 17 (3) and 26, Housing Act, 1957	Nil	Nil	Nil
3. Parts of buildings closed under Section 18, Housing Act, 1957	1	2	1

G. Unfit Houses made fit and Houses in which defects were remedied

	By Owner	By Local Authority
1. After informal action by Local Authority	425	Nil
2. After formal action under		
(a) Public Health Acts 	10	Nil
(b) Sections 9 and 16, Housing Act, 1957	2	Nil
3. Under Section 24, Housing Act, 1957 ...	Nil	

H. House Letting.

Eighty one houses were let in accordance with the Council's 'points scheme', forty seven to tenants and thirty four to sub-tenants. Ten houses were allocated to applicants nominated by the Council. Eight families residing in Council houses were transferred into houses more suitable to their needs.

Inspection and Supervision of Food.

(a) Milk Distributors:

Number of registered dairies ...	9
Number of registered distributors	22

(b) Sampling of Milk:

The department continues to take samples from the pasteurising plants at Egremont and Distington on behalf of the County Council.

Of the forty three samples taken for Phosphatase and B. Coli Tests, from the plants, one was not satisfactory.

One sample taken from a distributor was satisfactory.

(c) Food Inspections :

The following tables indicates the number and type of premises in the area to which the provisions of Section 13 of the Food and Drugs Act applies :—

Premises :				Number	Inspections
Butchers	...	...	...	20	30
Fishmongers and Poulterers	...	...	...	2	2
Greengrocers and Fruiterers	...	...	...	14	53
Grocers	...	...	...	130	76
Fried Fish Shops	...	...	...	12	14
Confectioners	...	...	...	27	16
Dairies	...	...	...	9	66
Restaurants and Food Preparing					
Premises	...	...	...	66	8
Ice Cream Premises					
(a) Manufacturers	...	...	...	1	8
(b) Retailers	...	...	...	71	60
Hotels and Inns	...	...	...	107	7
Bakehouses	...	...	...	15	18
Slaughterhouses	...	...	...	2	124
Street Vendors' and Hawkers' Carts	—				1

Of the above premises twenty eight are registered for the preparation or manufacture of sausages, potted, pressed, pickled or preserved food, and seventy one for the sale of ice cream. There is one registered manufacturer of ice cream, who is very satisfactory.

Any contraventions of the Food and Drugs Act and Food Hygiene Regulations were suitably dealt with on the spot through co-operation with the person concerned, or by informal letters.

Fourteen applications for the sale of ice cream were received, all of which were granted. Six samples of ice cream were taken, five of which were Grade I. and one Grade III.

Condemned open food is dealt with by incineration, tinned goods are either opened and burnt or buried intact. The following table shows the amount of food condemned as unsatisfactory: —

Commodity					Weight in Pounds
Meat	...	...	...	...	952
Fish	...	...	...	...	25
Vegetables		...	...	...	1,590 $\frac{1}{4}$
Fruit	...	...	...	...	273
Fats	...	...	...	...	412 $\frac{1}{2}$
Milk Products		...	...	...	255 $\frac{3}{4}$
Soups	...	...	...	...	127
Biscuits		...	...	...	322 $\frac{1}{4}$
Flour	...	...	...	...	1,651
Cereals	...	...	...	...	320 $\frac{3}{4}$
Sugar Products			...	...	260
Beverages		...	...	...	308 $\frac{3}{4}$
Miscellaneous			...	...	192 $\frac{1}{4}$

(d) Slaughterhouses:

There are two slaughterhouses in the area, to which one hundred and twenty four visits were made.

The following table shows the number of carcasses inspected and condemned:—

CARCASES INSPECTED AND CONDEMNED

		Cattle excluding Cows			Sheep and Lambs			Pigs	Horses
		Cows	Cows	Calves	Lambs	Pigs	Horses		
Number killed	...	61	—	—	256	84	—		
Number inspected	...	61	—	—	256	84	—		
All Diseases except Tuberculosis and Cysticerchi									
Whole carcasses condemned	—	—	—	—	—	—	—		
Carcases of which some part or organ was condemned	3	—	—	—	4	3	—		
Percentage of the number inspected affected with disease other than Tuber- culosis and Cysticerchi	4.9	—	—	—	1.5	3.5	—		
Tuberculosis only									
Whole carcasses condemned	—	—	—	—	—	—	—		
Carcases of which some part or organ was condemned	...	—	—	—	—	—	—		
Percentage of the number inspected affected with Tuberculosis	...	—	—	—	—	—	—		
Cysticercosis									
Carcases of which some part or organ was condemned	...	—	—	—	—	—	—		
Carcases submitted to treat- ment by refrigeration	—	—	—	—	—	—	—		
Generalised and totally condemned	...	—	—	—	—	—	—		

(e) Meat Inspection :

The following table shows in tabular form diseases found other than tuberculosis and the amount of meat affected and destroyed.

	Weight in Pounds		
Bruising	8
Cirrhosis	13
Hydatid Cysts	$\frac{1}{4}$

Shops :—

There are three hundred and eighteen shops in the area; no inspections were made.

Movable Dwellings.

There are nine licensed camping sites in the area and sixteen applications to erect or station and use a movable dwelling were received and granted. Sixty inspections were made and no offence called for other than verbal action.

Filthy and Verminous Premises.

Fifty five inspections were made to thirty two houses. The method of dealing with verminous premises by supplying insecticides, instructing occupiers in their use and in general principle of hygiene continues.

Control of Rats and Mice.

A contract for the treatment of the Council's sewers, tips and premises, submitted by Disinfestation Ltd., of Newcastle-on-Tyne, was accepted by the Council and treatment commenced early in the year. The contract is over a period of three years and the treatment is to be quarterly.

The indiscriminate dumping of refuse by certain sections of the public encourages rats to spread and renders control more difficult. The public having an efficient refuse collection, it is difficult to comprehend why this practice should occur.

Drainage and Sewerage.

Nine houses were converted from the conservancy system to water carriage:—

Parish	Drained to :		
		Main Sewer	Septic Tank
Egremont	...	—	1
Gosforth	...	—	1
Haile	...	—	2
Netherwasdale	...	—	1
Ponsonby	...	—	1
St. Bees	...	—	1
St. John	...	—	1
Weddicar	...	—	1
		—	9

Sanitary Conveniences.

A urinal was erected in the village of Moor Row.

Refuse Collection and Disposal.

Six refuse tips are in use within the area; these are situated at Langhorn, Bigrigg, 2, Cleator Moor, Distington, Frizington and Moor Row.

Private contractors employed on the collection of refuse and privy contents have continued to deal with sixty five outlying properties distributed in the following parishes:— Egremont 6, Arlecdon and Frizington 45, Weddicar 4 and Moresby 10.

Water Supply.

Forty samples of water were taken, thirty eight for bacteriological and two for chemical analysis; the following table shows the source and condition of the samples:—

Bacteriological :—

Source :			Satisfactory	Unsatisfactory
Ennerdale Lake/Wormgill				
(Mixed Supply)	...	...	3	2
Meadley	...	...	4	4
Cogra Moss	...	...	3	—
Wormgill	...	...	2	6
Ennerdale Lake/Lamb Hill				
(Mixed Supply)	...	...	1	1
Owsen Fell	...	...	2	2
Gosforth Springs	...	...	1	5
Coulderton Spring		...	—	2
Totals	...	...	16	22

Chemical :—

Source :			Satisfactory	Unsatisfactory
Gosforth Springs	...	...	1	—
Coulderton Spring	...	...	1	—
Totals	...	...	2	—

Particulars of the number of houses and the estimated population on public supplies are shown in the following table :—

Parish	No. of houses supplied from			Estimated Population Supplied
	No. of Houses	Public Water Mains : (a) Direct (b) Stand-pipe		
Arlecdon and Frizington	1,297	1,280	10	4,287
Cleator Moor ...	1,941	1,934	—	6,402
Distington 	809	793	—	2,559
Egremont 	2,142	2,140	—	6,300
Ennerdale and Kinniside	93	36	—	119
Gosforth 	245	213	—	636
Haile 	52	40	—	139
Lamplugh 	220	201	—	658
Lowca 	288	287	—	283
Lowside Quarter ...	131	64	—	192
Moresby 	287	267	—	926
Netherwasdale ...	41	—	—	—
Parton 	333	333	—	1,338
Ponsonby 	27	24	—	84
Rottington 	20	17	—	71
St. Bees 	356	348	3	1,039
St. Bridget 	191	161	—	785
St. John 	499	494	—	1,613
Weddicar 	120	103	5	457

Public Swimming Baths.

There are no public swimming baths in the District.

Other Inspections.

The following table is a summary of inspections carried out not appearing in another part of the report and not calling for special consideration:—

Water Supply	...	...	...	...	274
New Drainage	...	...	...	...	217
Stables and Piggeries	...	...	...	...	1
Public Conveniences	...	...	...	...	6
Refuse Collection	...	...	...	...	14
Refuse Disposal	...	...	...	...	21
Building Byelaws	...	...	...	...	141
Nuisances	...	...	...	...	82
Sewerage	...	...	...	...	116
Number of Houses inspected	...	...	...	...	1,619
Number of inspections made to Houses					2,068
Enquiries in cases of infectious Diseases					6
Visits re. Disinfection	...	...	...	...	6
Miscellaneous Infectious Disease inspections					137
Number of Properties inspected under the Prevention of Damage by Pests Act	...				42
Number of inspections made to properties under the Prevention of Damage by Pests Act					55
Miscellaneous inspections	...	...	...	...	1,129

FACTORIES AND WORKSHOPS

1. Inspection of Factories, Workshops and Workplaces.

		Number on Register	Inspec- tions	Number of : Written Notices	Prose- cutions
(1) Factories without Mechanical power	...	11	—	—	—
(2) Factories with Mechanical power	...	78	7	—	—
(3) Other premises	...	1	—	—	—
Totals	...	90	7	—	—

2. Defects found in Factories, Workshops and Workplaces.

Number of cases in which Defects were :—					
			Referred		
			to H.M. Inspector	by H.M. Inspector	Prose- cutions
Want of Cleanliness	—	—	—	—	—
Overcrowding ...	—	—	—	—	—
Unreasonable Temperature	—	—	—	—	—
Inadequate Ventilation	—	—	—	—	—
Ineffective drainage of floors	—	—	—	—	—
Sanitary Conveniences :					
(a) Insufficient	—	1	—	1	—
(b) Unsuitable or Defective	—	—	—	—	—
(c) Not separated for Sexes	—	—	—	—	—
Other Offences	—	—	—	—	—
Totals	—	1	—	1	—



APPENDIX

Date	Source	Before or after Chlorination	Number of Organisms on Nutrient Agar		Probable number of Coliform Organisms per 100 mls.	Probable number of Faecal coli per 100 mls.	Clostridium Welchii per 50 mls.
			in 48 hours at 37° C.	in 3 days at 20/22° C.			
28-7-59	Meadley	After	12	344	16	16	present
12-10-59	Wormgill	Unchlorinated	Remarks: 4	Very unsatisfactory. 22	6	6	present
			Remarks: 14	Unsatisfactory.	0	0	present
21-10-59	Meadley	After	14	3	0	0	present
27-10-59	Wormgill	Unchlorinated	Remarks: 2	Satisfactory.	18+	18+	present
			Remarks: 9	Very unsatisfactory.	2	0	present
2-11-59	Wormgill	Unchlorinated	9	65	2	0	present
23-11-59	Wormgill	Unchlorinated	Remarks: 11	Fairly satisfactory for a non-chlorinated water, although the sample does not attain the highest bacteriological purity.	0	0	present
			Remarks: 0	Not entirely satisfactory, organisms of faecal origin not present.	1	1	present
7-12-59	Gosforth Springs	Unchlorinated	0	7	1	1	present in 2 days
7-12-59	Gosforth Springs	Unchlorinated	Remarks: 0	Not of the highest standard, but assuming that there is adequate storage and/or chlorination the water can be made suitable for domestic use.	9	9	present in 4 days
			Remarks: 0	Unsatisfactory.	9	9	present in 4 days

Public Analyst's Laboratory,
Flag Lane,
WARRINGTON.
19th December, 1959.

REPORT upon the analysis of one sample of water, received on the 8th December, 1959.

Sample marked :—11-25 a.m. 7-12-59. Taken at inlet to Gosforth Reservoir. Source : Gosforth Springs. (Not chlorinated). Weather: Fine with gale force winds after heavy rains. Temperature of sample 42° F.

Analysis :

Appearance	clear and colourless
Odour	nil
Reaction, pH.	6.4
	- parts per million -
Total solids	80
Nitrogen as free and saline ammonia	0.01
Nitrogen as albuminoid ammonia	0.00
Nitrogen as nitrites	nil
Nitrogen as nitrates	0.00
Chlorides, as Cl	12
Oxygen absorbed from permanganate in 4 hours at 27° C.	0.51
Total hardness	24
Temporary hardness	11
Permanent hardness	13
Alkalinity	11
Free chlorine	nil
Poisonous metals	nil
Potassium, as K.	0.4
Fluorine, as F.	0.2

Opinion.

The chemical analysis of this water is satisfactory.

for RUDDOCK & SHERRATT.
(Signed) J. GRAHAM SHERRATT.

GEO. TODD & SON
PRINTERS
WHITEHAVEN